

REMARKS

This responds to the Office Action mailed on December 11, 2007. Claims 1-32 are pending in this application.

§101 Rejection of the Claims

Claims 1-5 and 6-13 were rejected under 35 USC § 101 because the claimed invention is directed to non-statutory subject matter. Specifically, the Office rejected claims 1-5 and 6-13 because such claims fail to produce a useful, concrete and tangible result because of a conditional statement in the claims. Producing a useful, concrete and tangible result is a requirement when the claims are not within one of the four enumerated statutory categories of patentable subject matter recited in section 101 and the claims are directed to no more than an abstract idea, a natural phenomena, or a law of nature. As further described below, claims 1-5 and 6-13 are within one of the four enumerated statutory categories of patentable subject matter recited in section 101 and the claims are not directed to *no more than* an abstract idea, a natural phenomena, or a law of nature. Accordingly, there is no *per se* requirement that claims must produce a useful, concrete and tangible result to be statutory under 35 USC § 101. Moreover, there is no *per se* requirement that claims having conditional statements are not statutory under 35 USC § 101.

Claims 1-5 are apparatus claims. Claims 6-13 are method claims. Such claims fall within at least one of the four enumerated categories of patentable subject matter recited in 35 U.S.C. § 101, which states:

Whoever invents or discovers any new and useful **process, machine, manufacture, or composition of matter**, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
(Emphasis added).

35 U.S.C. § 101.

Further, the MPEP states:

B. Determine Whether the Claimed Invention Falls Within An Enumerated Statutory Category

To properly determine whether a claimed invention complies with the statutory invention requirements of 35 U.S.C. 101, **USPTO personnel must first identify whether the claim falls within at least one of the four enumerated categories of patentable subject matter recited in section 101 (i.e., process, machine, manufacture, or composition of matter).**

In many instances it is clear within which of the enumerated categories a claimed invention falls. Even if the characterization of the claimed invention is not clear, this is usually not an issue that will preclude making an accurate and correct assessment with respect to the section 101 analysis. The scope of 35 U.S.C. 101 is the same regardless of the form or category of invention in which a particular claim is drafted. *AT&T*, 172 F.3d at 1357, 50 USPQ2d at 1451. See also *State Street*, 149 F.3d at 1375, 47 USPQ2d at 1602 wherein the Federal Circuit explained:

The question of whether a claim encompasses statutory subject matter should not focus on which of the four categories of subject matter a claim is directed to -- process, machine, manufacture, or composition of matter -- [provided the subject matter falls into at least one category of statutory subject matter] but rather on the essential characteristics of the subject matter, in particular, its practical utility.

For example, a claimed invention may be a combination of devices that appear to be directed to a machine and one or more steps of the functions performed by the machine. Such instances of mixed attributes, although potentially confusing as to which category of patentable subject matter the claim belongs, does not affect the analysis to be performed by USPTO personnel. Note that an apparatus claim with process steps is not classified as a "hybrid" claim; instead, it is simply an apparatus claim including functional limitations. See, e.g., *R.A.C.C. Indus. v. Stun-Tech, Inc.*, 178 F.3d 1309 (Fed. Cir. 1998) (unpublished). The burden is on the USPTO to set forth a *prima facie* case of unpatentability. (Emphasis added).

Manual of Patent Examining Procedure (MPEP), Eighth Edition, August 2001, Latest Revision August 2006, § 2106 IV.B.

Applicants respectfully submit that claims 1-5 and 6-13 clearly fall within at least one of the four enumerated categories of patentable subject matter recited in section 101, and thus comply with the statutory invention requirements of 35 U.S.C. § 101. By way of example, but not limited to this example, independent claim 1 includes a cryptographic processor, a cryptographic unit, a nonvolatile memory and a controller. Also by way of example, but not limited to this example, independent claim 6 includes receiving primitive instructions into a cryptographic processor within a wireless device and retrieving a microcode instruction from a nonvolatile memory in the cryptographic processor based on the primitive instruction. The fact

that there is a condition on the execution of an instruction does not render claims 1-5 and 6-13 non-statutory.

Further, the Office Action has not shown how independent claim 1 is directed to *no more than* an abstract idea, a natural phenomena, or a law of nature. Here, independent claim 1 is directed to an apparatus including a processor, memory and a controller, and thus is not merely an abstract idea, a natural phenomena, or a law of nature. Similarly, independent claim 6 is directed to a method for receiving instructions into a cryptographic processor within a wireless device and retrieving microcode instructions from a nonvolatile memory in the cryptographic processor based on the primitive instruction, and thus is not merely an abstract idea, a natural phenomena, or a law of nature.

Still further, since independent claims 1 and 6 are directed to an apparatus and method, respectively, and not merely an abstract idea, a natural phenomena, or a law a nature, the statement in the Office Action wherein – “[t]his claimed subject matter lacks a practical application of a judicial exception . . . since it fails to produce a useful, concrete and tangible result” are not applicable, as these tests are only used to determine whether claims that do fall under one of these judicial exceptions may still qualify for patent protection. Since independent claims 1 and 6 do not fall into the category of being *no more than* an abstract idea, a natural phenomena, or a law of nature, these tests are not necessary or required in order to qualify independent claims 1 and 6 as statutory subject matter under 35 U.S.C. § 101.

§102 Rejection of the Claims

Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration. *In re Dillon* 919 F.2d 688, 16 USPQ2d 1897, 1908 (Fed. Cir. 1990) (en banc), cert. denied, 500 U.S. 904 (1991).

Claims 1-13 and 19-22

Claims 1-13 and 19-22 were rejected under 35 USC § 102(e) as being taught by Dariel (U.S. Patent 7,058,818 B2). Applicant respectfully traverses.

Among the differences, claim 1 recites “wherein the controller is to preclude execution of the sensitive operation if the apparatus is within an untrusted state.” Among the differences,

claim 6 and 19 recite “executing the at least one microcode instruction in response to a determination the microcode instruction is not a sensitive operation or in response to a determination the at least one microcode instruction is a sensitive operation and the cryptographic processor is in a trusted state.”

The Office indicated that these limitations were disclosed by Dariel at col. 7, lines 28-36 and component #16 in Figure 2. Applicant respectfully traverses that this section of Dariel discloses the limitations cited above. This section of Dariel relates to receiving encrypted data by a controller and storage of such data in memory. This section of Dariel also relates to receiving and storing of decryption keys in a different memory. This section of Dariel does not disclose that the controller is to preclude execution of an operation if a condition is not met. Specifically, this section of Dariel does not disclose that the controller is to preclude execution of a sensitive operation if the apparatus is within an untrusted state.

Because Dariel does not disclose each element of claims 1, 6 and 19, Applicant respectfully submits that the rejection of claims 1, 6 and 19 under 35 U.S.C. §102 has been overcome. Because the claims that depend from claims 1, 6 and 19 depend from and further define claims 1, 6 and 19, Applicant respectfully submits that the rejection of the dependent claims under 35 U.S.C. §102 has been overcome.

Claims 14-18 and 23-26

Claims 14-18 and 23-26 were rejected under 35 USC § 102(e) as being taught by Howard et al. (U.S. Patent 7,269,736 B2). Applicant respectfully traverses.

Among the differences, claims 14 and 23 recite “validating a cryptographic key of the patch based on a hash of the cryptographic key that is stored in a one time programmable storage in a nonvolatile memory that is external to the cryptographic processor.” The Office indicated that this limitation is disclosed by Howard at col. 5, lines 41-67 and col. 16, lines 1-14. Applicant respectfully traverses. This section of Howard relates to associating a hash value (v2 308) with a key seed (k1 310). The key seed (k1 310) along with other seed data is then used to generate a key (k2 320). Key k2 320 is then used for decryption/encryption. Thus, this section of Howard relates to creating of a key using key seeds. This section of Howard does not disclose any type of validation of a cryptographic key. Specifically, this section of Howard does not

disclose validation of a cryptographic key based on a hash that is stored in a one time programmable storage in a memory that is external to the cryptographic processor.

Because Howard does not disclose each element of claims 14 and 23, Applicant respectfully submits that the rejection of claims 14 and 23 under 35 U.S.C. §102 has been overcome. Because the claims that depend from claims 14 and 23 depend from and further define claims 14 and 23, Applicant respectfully submits that the rejection of the dependent claims under 35 U.S.C. §102 has been overcome.

Claims 27-32

Claims 27-32 were rejected under 35 USC § 102(e) as being taught by Zotto et al. (U.S. Publication No. 2004/0009815). Applicant respectfully traverses.

Among the differences, claim 27 recites “a controller to cause at least one of the number of cryptographic units to validate the patch based on the cryptographic key and the hash of the cryptographic key.” The Office indicated this limitation is disclosed by Zotto at ¶0137 and ¶0155. Applicant respectfully traverses. These sections of Zotto relate to a system bus and components of console that includes a CPU, memory controller, ROM and RAM integrated on a common module. There is also a description of a hard disk drive and media drive coupled to the memory controller. However, these sections of Zotto do not disclose any type of validation. Specifically, these sections of Zotto do not disclose a controller to validate a patch based on the cryptographic key and the hash of the cryptographic key.

Because Howard does not disclose each element of claim 27, Applicant respectfully submits that the rejection of claim 27 under 35 U.S.C. §102 has been overcome. Because the claims that depend from claim 27 depend from and further define claim 27, Applicant respectfully submits that the rejection of the dependent claims under 35 U.S.C. §102 has been overcome.

RESERVATION OF RIGHTS

In the interest of clarity and brevity, Applicant may not have addressed every assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney (612-371-2103) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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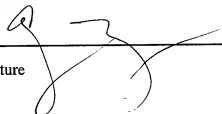
Date 6-11-08

By 

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 11th day of June 2008.

Amy Moriarty
Name


Signature